

# Haipeng Lu

## List of Publications by Year in descending order

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46  
papers

3,756  
citations

186265  
28  
h-index

254184  
43  
g-index

47  
all docs

47  
docs citations

47  
times ranked

4252  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Advances in two-dimensional organic–inorganic hybrid perovskites. <i>Energy and Environmental Science</i> , 2020, 13, 1154-1186.   | 30.8 | 420       |
| 2  | Chiral-induced spin selectivity enables a room-temperature spin light-emitting diode. <i>Science</i> , 2021, 371, 1129-1133.   | 12.6 | 340       |
| 3  | Spin-dependent charge transport through 2D chiral hybrid lead-iodide perovskites. <i>Science Advances</i> , 2019, 5, eaay0571.   | 10.3 | 275       |
| 4  | Enhanced Charge Transport in 2D Perovskites via Fluorination of Organic Cation. <i>Journal of the American Chemical Society</i> , 2019, 141, 5972-5979.                                      | 13.7 | 274       |
| 5  | Bimolecular Additives Improve Wide-Band-Gap Perovskites for Efficient Tandem Solar Cells with CIGS. <i>Joule</i> , 2019, 3, 1734-1745.   | 24.0 | 227       |
| 6  | Metastable Dion-Jacobson 2D structure enables efficient and stable perovskite solar cells. <i>Science</i> , 2022, 375, 71-76.  | 12.6 | 216       |
| 7  | Highly Distorted Chiral Two-Dimensional Tin Iodide Perovskites for Spin Polarized Charge Transport. <i>Journal of the American Chemical Society</i> , 2020, 142, 13030-13040.                | 13.7 | 198       |
| 8  | Infrared Quantum Dots: Progress, Challenges, and Opportunities. <i>ACS Nano</i> , 2019, 13, 939-953.   | 14.6 | 153       |
| 9  | Impact of Layer Thickness on the Charge Carrier and Spin Coherence Lifetime in Two-Dimensional Layered Perovskite Single Crystals. <i>ACS Energy Letters</i> , 2018, 3, 2273-2279.           | 17.4 | 126       |
| 10 | Carrier control in Sn–Pb perovskites via 2D cation engineering for all-perovskite tandem solar cells with improved efficiency and stability. <i>Nature Energy</i> , 2022, 7, 642-651.        | 39.5 | 121       |
| 11 | Excitonic Effects in Methylammonium Lead Halide Perovskites. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 2595-2603.  | 4.6  | 107       |
| 12 | Silver-Mediated C–H Activation: Oxidative Coupling/Cyclization of N-Arylimines and Alkynes for the Synthesis of Quinolines. <i>Journal of Organic Chemistry</i> , 2012, 77, 501-510.         | 3.2  | 101       |
| 13 | Strategies to Achieve High Circularly Polarized Luminescence from Colloidal Organic–Inorganic Hybrid Perovskite Nanocrystals. <i>ACS Nano</i> , 2020, 14, 8816-8825.                         | 14.6 | 94        |
| 14 | Spin-Dependent Photovoltaic and Photogalvanic Responses of Optoelectronic Devices Based on Chiral Two-Dimensional Hybrid Organic–Inorganic Perovskites. <i>ACS Nano</i> , 2021, 15, 588-595. | 14.6 | 85        |
| 15 | Sensitizing Singlet Fission with Perovskite Nanocrystals. <i>Journal of the American Chemical Society</i> , 2019, 141, 4919-4927.  | 13.7 | 83        |
| 16 | Enhancing Charge Transport of 2D Perovskite Passivation Agent for Wide-Bandgap Perovskite Solar Cells Beyond 21%. <i>Solar Rrl</i> , 2020, 4, 2000082.                                       | 5.8  | 79        |
| 17 | Transforming energy using quantum dots. <i>Energy and Environmental Science</i> , 2020, 13, 1347-1376.   | 30.8 | 76        |
| 18 | Iodide-Passivated Colloidal PbS Nanocrystals Leading to Highly Efficient Polymer:Nanocrystal Hybrid Solar Cells. <i>Chemistry of Materials</i> , 2016, 28, 1897-1906.                        | 6.7  | 71        |

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|----|--|------|-----------|
| 19 | Direct Detection of Circularly Polarized Light Using Chiral Copper Chloride@Carbon Nanotube Heterostructures. <i>ACS Nano</i> , 2021, 15, 7608-7617.   | 14.6 | 69        |
| 20 | Ultrafast Reaction Mechanisms in Perovskite Based Photocatalytic C-C Coupling. <i>ACS Energy Letters</i> , 2020, 5, 566-571.   | 17.4 | 61        |
| 21 | Control of light, spin and charge with chiral metal halide semiconductors. <i>Nature Reviews Chemistry</i> , 2022, 6, 470-485.   | 30.2 | 58        |
| 22 | Origin of Broad-Band Emission and Impact of Structural Dimensionality in Tin-Alloyed Ruddlesden-Popper Hybrid Lead Iodide Perovskites. <i>ACS Energy Letters</i> , 2020, 5, 347-352.                       | 17.4 | 55        |
| 23 | Enhanced photoredox activity of CsPbBr <sub>3</sub> nanocrystals by quantitative colloidal ligand exchange. <i>Journal of Chemical Physics</i> , 2019, 151, 204305.  | 3.0  | 52        |
| 24 | Tuning Spin-Polarized Lifetime in Two-Dimensional Metal-Halide Perovskite through Exciton Binding Energy. <i>Journal of the American Chemical Society</i> , 2021, 143, 19438-19445.                        | 13.7 | 42        |
| 25 | A Multi-Dimensional Perspective on Electronic Doping in Metal Halide Perovskites. <i>ACS Energy Letters</i> , 2021, 6, 1104-1123.  | 17.4 | 38        |
| 26 | Surface lattice engineering through three-dimensional lead iodide perovskitoid for high-performance perovskite solar cells. <i>CheM</i> , 2021, 7, 774-785.  | 11.7 | 37        |
| 27 | Exposing the Dynamics and Energetics of the N-Heterocyclic Carbene-Nanocrystal Interface. <i>Journal of the American Chemical Society</i> , 2016, 138, 14844-14847.  | 13.7 | 34        |
| 28 | Tunable Room-Temperature Synthesis of Coinage Metal Chalcogenide Nanocrystals from N-Heterocyclic Carbene Synthons. <i>Chemistry of Materials</i> , 2017, 29, 1396-1403.                                   | 6.7  | 31        |
| 29 | n-Type PbSe Quantum Dots via Post-Synthetic Indium Doping. <i>Journal of the American Chemical Society</i> , 2018, 140, 13753-13763.   | 13.7 | 28        |
| 30 | Chemical Control of Magnetic Ordering in Hybrid Fe-Cl Layered Double Perovskites. <i>Chemistry of Materials</i> , 2022, 34, 2813-2823.   | 6.7  | 27        |
| 31 | Bismuth Doping of Germanium Nanocrystals through Colloidal Chemistry. <i>Chemistry of Materials</i> , 2017, 29, 7353-7363.   | 6.7  | 26        |
| 32 | Spin selectivity in chiral metal-halide semiconductors. <i>Nanoscale</i> , 2021, 13, 18925-18940.  | 5.6  | 26        |
| 33 | Designing Janus Ligand Shells on PbS Quantum Dots using Ligand-Ligand Cooperativity. <i>ACS Nano</i> , 2019, 13, 3839-3846.  | 14.6 | 23        |
| 34 | Synthesis and Electrocatalytic HER Studies of Carbene-Ligated Cu <sub>3</sub> xP Nanocrystals. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 16394-16401.                                      | 8.0  | 19        |
| 35 | Role of Exciton Binding Energy on LO Phonon Broadening and Polaron Formation in (BA) <sub>2</sub> PbI <sub>4</sub> Ruddlesden-Popper Films. <i>Journal of Physical Chemistry C</i> , 2020, 124, 9496-9505. | 3.1  | 18        |
| 36 | Charge transfer states and carrier generation in 1D organolead iodide semiconductors. <i>Journal of Materials Chemistry A</i> , 2021, 9, 14977-14990.  | 10.3 | 15        |

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|----|---|------|-----------|
| 37 | On the optical anisotropy in 2D metal-halide perovskites. <i>Nanoscale</i> , 2022, 14, 752-765.   | 5.6  | 15        |
| 38 | Structural Asymmetry and Chiroptical Activity of Chiral Antimony-Halide Hybrids. <i>European Journal of Inorganic Chemistry</i> , 0, , .                                  | 2.0  | 10        |
| 39 | Perovskite Electronic Ratchets for Energy Harvesting. <i>Advanced Electronic Materials</i> , 2020, 6, 2000831.  | 5.1  | 7         |
| 40 | Structural Insights on Microwave-Synthesized Antimony-Doped Germanium Nanocrystals. <i>ACS Nano</i> , 2021, 15, 1685-1700.  | 14.6 | 7         |
| 41 | Tandem and Triple-Junction Polymer:Nanocrystal Hybrid Solar Cells Consisting of Identical Subcells. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 18306-18311. | 8.0  | 5         |
| 42 | Ultrafast Kinetic DNA Hybridization Assay Based on the Visualization of Threshold Turbidity. <i>Analytical Chemistry</i> , 2012, 84, 3500-3506.                           | 6.5  | 3         |
| 43 | Enhancing Charge Transport of 2D Perovskite Passivation Agent for Wide-Bandgap Perovskite Solar Cells Beyond 21%. <i>Solar Rrl</i> , 2020, 4, 2070065.                    | 5.8  | 2         |
| 44 | Metastable Dion-Jacobson 2D structure enables efficient and stable perovskite solar cells. <i>Science</i> , 2021, , eabj2637.   | 12.6 | 2         |
| 45 | Hybrid Polymer: Nanocrystal Solar Cells. <i>Materials and Energy</i> , 2018, , 405-444.   | 0.1  | 0         |
| 46 | Chiral Halogenometalate Hybrids for Spin Manipulation. , 2022, , 137-158.   |      | 0         |